

# BAUFLOOR

Structural heating panel

- Rapid, even heat distribution
- Structural panel spanning joists or battens
- Dry construction
- Recyclable

## PRODUCT DESCRIPTION

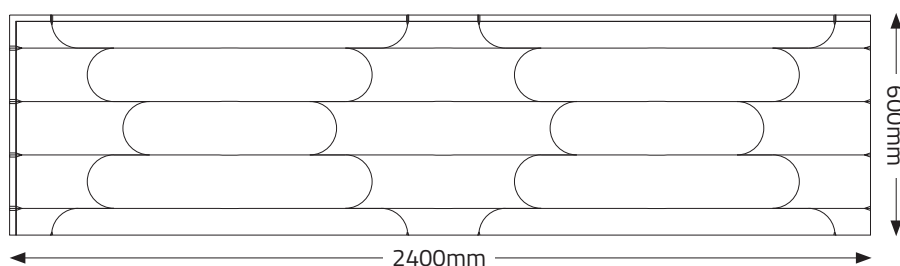
Structural heat distributing panel, once properly prepared, for ceramic tiles and natural stone, as well as for parquet, multi-layer parquet, laminate and LVT and PVC. Designed for even heat distributing over hydronic underfloor heating and cooling systems using timber joists or battens.

The BauFloor heat distributing panel is a chipboard with aluminium face based board which is a recyclable product. The plywood 'top panel' (by others) should be a minimum 6mm Flooring grade plywood glued and screwed in place.

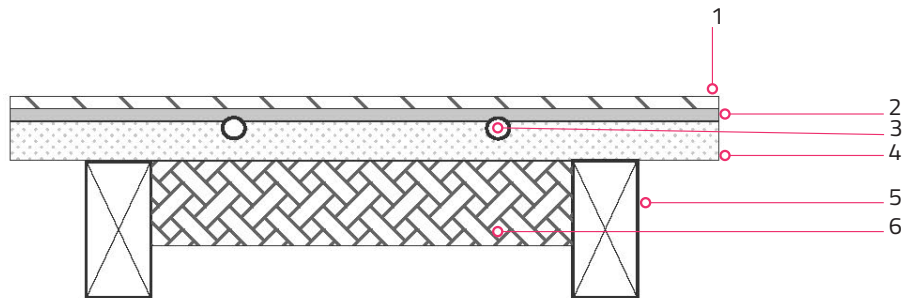
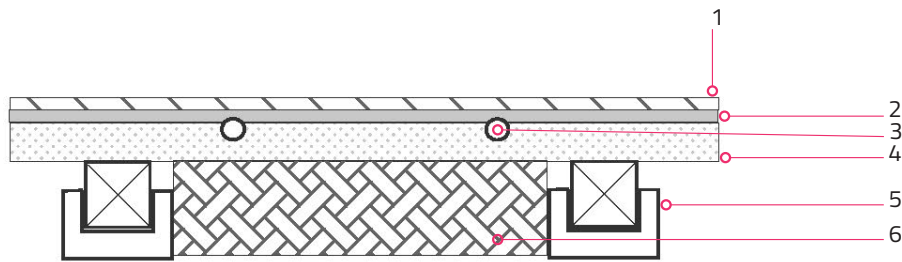
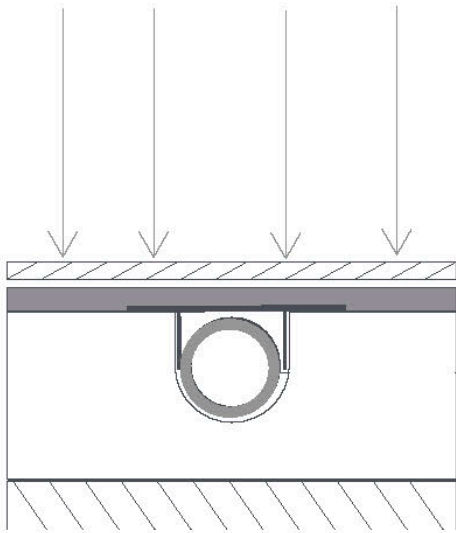
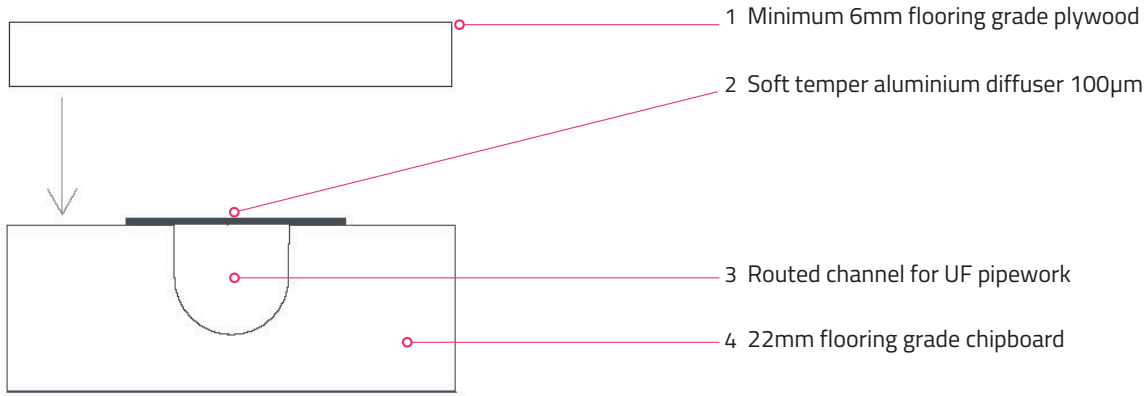


## DIMENSIONS

(Not to scale)



**PRODUCT SECTIONS**



- 1 - Floor finish
- 2 - Minimum 6mm Flooring Grade Plywood
- 3 - 12mm UF pipework
- 4 - BauFloor structural panel with aluminium diffuser
- 5 - Joist or acoustic support system
- 6 - Insulation layer

## TECHNICAL DATA

|   |  |
|---|--|
| <b>CONSTRUCTION TYPE</b>                    | <b>BS EN 1264-2 Type B</b>   |
| <b>STRUCTURAL PERFORMANCE</b>               | <p>BauFloor panel fixed over:</p> <ul style="list-style-type: none"> <li>▪ Acoustic battens over structural floor by others</li> <li>▪ Standard floor joists by others</li> <li>▪ Max. joist/batten spacing of 600mm cc</li> </ul> <p>BauFloor panels are Independently tested for strength compared to a standard 22mm chipboard panel with joists @ 600mm c-c = pass with min. 6mm MDF mechanically fixed to chipboard with 12mm pipe channels at 150m c-c</p> |
| <b>WEIGHT BEARING LAYER</b>                 | Plywood  |
| <b>WEIGHT BEARING LAYER THICKNESS</b>       | 6mm  |
| <b>WEIGHT BEARING LAYER FIXING</b>          | Bonded and screwed through to structural board using ??????? type screws   |
| <b>WEIGHT BEARING LAYER DIMENSION</b>       | By others  |
| <b>THERMAL DIFFUSION LAYER</b>              | Aluminium strips   |
| <b>THERMAL DIFFUSION LAYER THICKNESS</b>    | 100 µm   |
| <b>THERMAL DIFFUSION LAYER CONDUCTIVITY</b> | 200 W/mK   |
| <b>THERMAL INSULATION TYPE</b>              | By others  |
| <b>THERMAL INSULATION CONDUCTIVITY</b>      | By others  |
| <b>THERMAL INSULATION GRADE</b>             | By others  |
| <b>ACOUSTIC LAYER</b>                       | By others  |
| <b>STRUCTURAL BASEBOARD LAYER</b>           | P5 moisture resistant chipboard  |
| <b>STRUCTURAL BASEBOARD CONDUCTIVITY</b>    | 0.13 W/mK  |
| <b>STRUCTURAL BASEBOARD THICKNESS</b>       | 22mm   |
| <b>PIPE FIXING METHOD</b>                   | Grooved channels for 12mm pipework   |
| <b>STRUCTURAL BASEBOARD FIXING</b>          | Mechanically fixed to support structure  |
| <b>STRUCTURAL BASEBOARD PANEL DIMENSION</b> | Baseboard: 2400x600  |
| <b>Tolerances cut</b>                       | +/- 1.0 mm thickness +/- 0.3mm   |
| <b>FINISHED PANEL THICKNESS</b>             | Typically 28mm depending on top board  |
| <b>SYSTEM WEIGHT</b>                        | Approx. >20.04 kg/m <sup>2</sup> depending on top board  |
| <b>OZONE DEPLETION POTENTIAL (ODP)</b>      | -  |
| <b>RECYCLABLE</b>                           | Baseboard – Yes<br>Topboard – Yes  |
|   |  |

## HEATING PERFORMANCE DRT = 210C, 1.0 Tog covering per BS1264-3

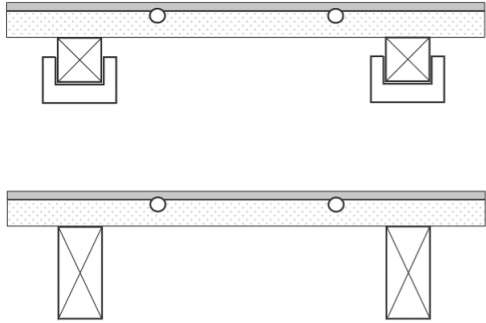
Using 6mm 0.13W/mK PLY board panel

| Pipe size | Pipe spacing | Heat output*<br>W/m <sup>2</sup> @<br>60/50<br>1.0 tog | Heat output*<br>W/m <sup>2</sup> @<br>55/45<br>1.0 tog | Heat output*<br>W/m <sup>2</sup> @<br>45/38<br>1.0 tog | Heat output*<br>W/m <sup>2</sup> @<br>35/29<br>1.0 tog |
|-----------|--------------|--|--|--|--|
| 12 x 1.4  | 150          | 80   | 70   | 49   | 26   |

\* Heat Outputs:

1. are indicative for comparison purposes
2. are based on design room temperature of 21°C
3. are based on effective heated area
4. will vary on foiled area around pipe bends
5. will increase/decrease depending on the floor covering and weight bearing layer used
6. will vary on final floor construction installed.

## STRUCTURAL TEST STATEMENT OF PERFORMANCE

|                           |  |
|---------------------------|--|
| <b>Test</b>               | <b>STRUCTURAL</b>  |
| <b>Testing Facility</b>   | This independent testing was carried out by an UKAS accredited, external consultancy lab.  |
| <b>Product</b>            | BauFloor   |
| <b>Construction</b>       | 22mm P5 BauFloor deck (base) panel with 6mm plywood top panel glued and screwed down.  |
| <b>Indicative Section</b> |   |
| <b>Statement</b>          | This is to confirm that Bauserv BauFloor structure with specific Bauserv BauFloor pattern as described above, assembled as per the Bauserv installation guide, laid over joists or battens at 400mm centres, has been tested in accordance with the British Standards BS EN 1195:1998 and BS EN 12871:2010, assessed against the requirements of Class I of BS EN 12871 Table 4, and has passed. |
| <b>Results</b>            | <b>Point Load results yielded a preliminary <math>F_{max.est}</math> of 8.31 kN.</b>   |

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